

ABSTRACT

A method for forming a semiconductor device having a reduced pitch is provided. The method includes providing a substrate, forming a material layer over the substrate, forming a photoresist layer over the material layer, exposing a top surface of the photoresist layer to radiation, and forming a silylated layer over the photoresist layer. The method further includes removing a portion of the silylated layer to expose the photoresist layer, removing the photoresist layer, removing portions of the material layer using the silylated layer as a mask, and removing another portion of the silylated layer.